DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018158
Date Inspected: 11-Nov-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: Mr. Tian lei

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Orthotropic Box Girder(OBG)

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 2

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint AP3032-001-338. Welder is identified as 067500. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC-P4-F.

FCAW of weld joint AP3032-001-632. Welder is identified as 066041. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC- P4-F.

FCAW of weld joint AP3032-001-968. Welder is identified as 066359. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC- P4-F.

FCAW Repair welding of weld joint SA3450-001-001. Welder is identified as 045209. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS:

WPS-345-FCAW-1G (1F)-Repair. The repair welding was being performed as per the Welding Repair Report (WRR) No: B-WR16821.This weld was rejected by ZPMC UT Technicians and recorded on UT report No: B787-UT-17457.

BAY- 3

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07314 and 07316.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Floor beam and longitudinal diaphragm weld Components. Total number of welds UT Tested: 9 No's. The weld designations are review as follows:

1. FB3286-001-078,064,050,154,168.
2. LD3043-001-032,020,036,016.

FCAW of weld joint FB3286-001-313. Welder is identified as 067876. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2233-TC-U4b-F.

FCAW of weld joint FB3286-001-211. Welder is identified as 067036. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2233-TC-U4c-F.

During QA random in-process observations of the fabrication of OBG lift 14, East Floor beam FB3273A, this QA observed ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate slotted holes without the Engineers approval. Total of 14 holes repaired. The welding was performed using Shielded Metal Arc Welding

(SMAW) in the flat (1G) position. The sleeve plate is identified as SA8002A. The holes are identified as 7~13th (both top and bottom). The Y locations for these holes are approximately 3000 mm, 3550 mm,3950 mm,4450 mm, 4900
mm,5400 mm and 5850 mm from the toe of the weld identified as SA8002-001-001(measured clock wise and looking
from top of the sleeve).The sleeve material thickness is 60 mm.

This QA Inspector generated an incident report on this date for the above issue, for further information see the incident report and attached photos.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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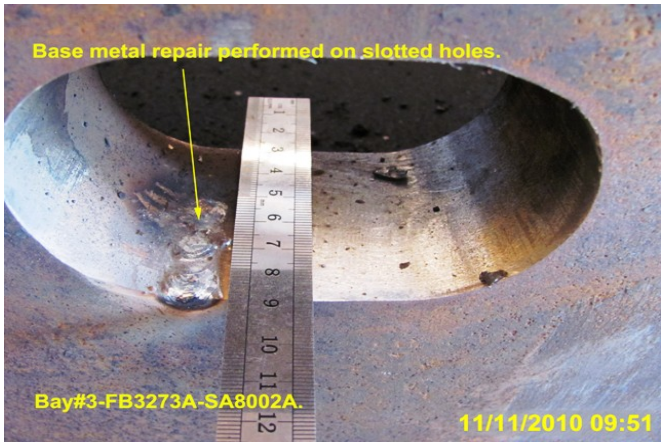

Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer